# Workshop to Develop a Portfolio of Low Latency Datasets for Time-Sensitive Applications

27-29 September 2016
Langley Research Center, Hampton VA

Time-sensitive remote sensing data are designed to meet the needs of decision makers who can rapidly interpret and integrate the information to guide actions more accurately and consistently. Low latency, or near-real time satellite data, contribute to activities that deliver societal benefits including disaster risk resilience, food security and sustainable agriculture, water and energy resource management, and ecosystem sustainability. NASA has expertise, research, observational infrastructure and partnerships to capture, process and deliver low latency data sets, but the extent of these assets are not fully mobilized. By articulating the urgent science-informed decision making enabled by rapid response using low latency satellite data, NASA, the community-of-practice, and stakeholders will be able to target resources to improve research results, advance application science, optimize data production, and guide technology development.

The goals of the workshop are:

1. Describe and characterize the existing NASA low latency data portfolio in Earth science;
2. Articulate the key underlying science questions that are answered with low latency remote sensing data; and
3. Articulate the issues and challenges of near-real time data acquisition and management.

***Expected Workshop Outcomes:***

- *Development of a portfolio for existing NASA NRT datasets and associated data products and infrastructure*
- *Identification of significant NRT shortfalls and opportunities for research and application science that would improve results*
- *Establish a community of practice and stakeholders to continue planning and coordination actions to increase and accelerate the use and utility of NRT data and target resources to address shortfalls and opportunities*

| **Tuesday, September 27, 2016** | |
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| **8:00am** | **Registration** |
| **9:00 - 10:40am** | NASA HQ Welcome. Presentations from David Green, Jack Kaye, Kevin Murphy. |
| **10:40am – 12:20pm** | Presentations from NRT data providers including Land, Atmosphere Near real-time Capability for EOS (LANCE), Direct Readout Laboratory (DRL), Science Investigator-led Processing Systems (SIPS), International Space Station (ISS) and Field Campaigns |
| **12:20pm** | ***Panel: Q & A with Speakers*** |
| **12:50pm** | **Lunch Break** |
| **2:00 – 4:00pm** | Breakout groups: portfolio development and gap identification for NRT data products, and discussion of NRT science questions. |
| **4:00 – 6:00pm** | Reports back from groups and discussion |
| **6:10pm** | ***NRT Social and Poster Session at Cafeteria area*** |

| Wednesday, September 28, 2016 | |
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| **8:00am** | **Coffee & Check-in** |
| **9:00am – 12:30pm** | Focus on sectors: presentations from paired NRT data producers and users in different sectors including: agriculture, weather, hydrological /meteorological disasters, fire, aerosol applications (including hurricanes and volcanoes), uses of NRT Landsat data and air quality |
| **12:30pm** | **Lunch Break** |
| **2:00pm** | Presentation on summary of current pre-Phase A and Phase A instruments and their NRT plans |
| **2:15 - 4:00pm** | Break out groups: portfolio development and gap identification for future instruments to ensure delivery of NRT data products in coming years |
| **4:00 – 5:15pm** | Report back and discussion |

| Thursday, September 29, 2016 | | |
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| **8:00am** | **Coffee & Check-in** | |
| **9:00am** | Welcome to Day 3 – Goals and objectives for third day of the meeting | |
| **9:10am** | Mike Freilich, NASA ESD | NRT data for NASA Earth Science |
| **9:40am** | Bill Gail, CTO of the Global Weather Corporation | The importance of NRT data for weather |
| **10:10am** | Panel Discussion – chaired by Lawrence Friedl | |
| **12:20am** | Closing Remarks | |
| **12:30pm** | **Adjourn** | |